# EXHIBIT 3

# UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

#### HIGHLY CONFIDENTIAL: SUBJECT TO PROTECTIVE ORDER

IN RE NAMENDA DIRECT PURCHASER ANTITRUST LITIGATION	) ) Civil Action No. 1:15-CV-07488 ) CLASS ACTION )
	) ) ) ) ) ) ) ) ) ) ) )

#### DECLARATION RELATED TO PROPOSED SETTLEMENT ALLOCATION PLAN

Dr. Russell L. Lamb President Monument Economics Group 1530 Wilson Blvd, Suite 560 Arlington, Virginia 22209

December 17, 2019

# I. Introduction and Assignment

- 1. I listed my background and qualifications in an Expert Report ("Lamb Report")<sup>1</sup> submitted in this matter on September 20, 2017. I also submitted an Expert Reply Report ("Lamb Reply Report")<sup>2</sup> in this matter on November 9, 2017. I was also deposed by Counsel for Defendants on October 6, 2017.<sup>3</sup> An updated copy of my C.V., including a list of the matters in which I have submitted expert testimony in the past four years, is attached to this Declaration as Appendix A. Monument Economics Group is being compensated for my work in this matter at my usual and customary rate of \$650 per hour.
- 2. I have been asked by Counsel for the direct purchaser Class<sup>4</sup> ("Plaintiffs") in this matter to develop a methodology that can be used to allocate the Net Settlement Fund<sup>5</sup> to members of the Class who submit claims as part of the claims process in a timely manner ("Claimants"). I describe this methodology in detail below.

#### II. Relevant Background

3. As discussed above, I previously issued two expert reports in this matter that addressed, among other issues, class certification and the amount of aggregate Class damages. As relevant

<sup>&</sup>lt;sup>1</sup> I filed an Expert Report in this matter on September 15, 2017, and an Amended Expert Report on September 20, 2017. Throughout the remainder of this Declaration, I refer to the Amended Expert Report as the "Lamb Report."

<sup>&</sup>lt;sup>2</sup> I filed an Expert Reply Report in this matter on October 25, 2017, and an Amended Expert Reply Report on November 9, 2017. Throughout the remainder of this Declaration, I refer to the Amended Expert Reply Report as the "Lamb Reply Report."

<sup>&</sup>lt;sup>3</sup> Deposition of Russell Lamb, October 6, 2017 (hereafter "Lamb Deposition").

<sup>&</sup>lt;sup>4</sup> The "Class" in this matter is defined as: "All persons or entities in the United States and its territories who purchased branded Namenda IR 5 or 10 mg tablets, and/or generic Namenda IR 5 or 10 mg tablets (including an authorized generic), and/or branded Namenda XR capsules, directly from Forest or its successors in interest, Actavis and Allergan, and/or from any generic manufacturer at any time during the period from June 2012 until September 30, 2015." See Lamb Report at ¶6. I understand that the Court certified the Class in this matter on August 2, 2018. See United States District Court Southern District of New York, *In Re Namenda Direct Purchaser Antitrust Litigation*, Memorandum Decisions and Order Denying Defendants' Motion for Summary Judgment; Granting in Substantial Part and Denying in Part Defendants' Daubert Motions to Exclude Opinions and Testimony of Plaintiffs' Experts; and Granting Plaintiffs' Motion for Class Certification, dated August 2, 2018 (hereafter "Class Certification Decision and Order").

<sup>&</sup>lt;sup>5</sup> I understand that the "Net Settlement Fund" includes the \$750 million received in the settlement with Forest Laboratories, LLC, Actavis plc, Forest Laboratories, Inc., and Forest Laboratories Holdings Ltd. (collectively, "Defendants"), plus interest, and net of Court-approved attorneys' fees, Court-approved named plaintiff service awards, and Court-approved expenses, including settlement-related costs and expenses.

to this Declaration, I previously calculated aggregate Class damages under the "No Reverse Payment Scenario," which included generic Namenda IR entry on June 1, 2012, in the amount of \$6,930,602,447, as described in my prior Reports. \$78,353,141 of the aggregate Class damages (or 1.13 percent of the aggregate Class damages) were incurred on the Class's generic Namenda IR purchases (that is, "Generic-Generic" Damages) and \$6,852,249,306 of the aggregate Class damages (or 98.87 percent of the aggregate Class damages) were incurred on the Class's purchases of brand Namenda IR and brand Namenda XR. The different percentages reflect the fact that damages on brand purchases were calculated as the difference between the high brand price and the much lower generic price; while damages on generic purchases were calculated as the difference between the (already low) generic price and the even lower generic price that would have prevailed with earlier generic competition. These damages calculations utilized sales data produced by the Defendants for brand Namenda IR and brand Namenda XR and generic Namenda IR sales data produced by Actavis, Amneal, Dr. Reddy, Lupin, and Mylan, as well as IMS Health data. \*8

4. Several dates and time periods utilized in my prior damages calculations are relevant to the proposed allocation method. In my prior damages calculations, I measured "Brand-Generic" damages from June 1, 2012 through June 30, 2017. In addition, in the real world, generic

<sup>&</sup>lt;sup>6</sup> Lamb Report ¶141, Table 2. June 2012 is the start of the Class Period and, as I noted in the Lamb Report, I understand that Plaintiffs alleged that absent a settlement generic entry would have occurred as early as June 2012. Lamb Report ¶8.

<sup>&</sup>lt;sup>7</sup> Lamb Report ¶141, Table 2.

<sup>&</sup>lt;sup>8</sup> I received but did not use generic Namenda IR sales data produced by Sun because, as I previously explained, the quarterly aggregated sales data produced by Sun could not reliably be used to calculate prices across customers, and therefore, I excluded the Sun data from my damages analysis. See Lamb Report at ¶123, fns 7, 239. However, the Sun data contains information on the number of units sold by customer which is sufficient to allow me to incorporate these data into my methodology for Net Settlement Fund allocation, that is, I can use the produced Sun data to calculate the net unit purchases of generic Namenda IR made by each Class member directly from Sun. Upon further review of the Sun data, I identified two additional entities that purchased generic Namenda IR during the Class Period but which were not included previously in the Lamb Report, namely Cochran Wholesale Pharmacy and QK Healthcare. Both are very small purchasers and can be included in my methodology for Net Settlement Fund allocation. In addition, I note that my prior report listed DMS Pharmaceutical Group ("DMS") as a Class member. Lamb Report at Figure 1. However, upon further review of the data, DMS does not qualify as a Class member because DMS's first purchase of brand or generic Namenda IR or brand Namenda XR was after the end of the class period, that is, after September 30, 2015.

Namenda IR actually launched on July 11, 2015 and brand Namenda XR actually launched on June 4, 2013.

# III. Methodology for Net Settlement Fund Allocation

- 5. The methodology I have developed for the purposes of allocating the Net Settlement Fund calculates each Claimant's share of the Net Settlement Fund, *pro rata*, based on the amount of direct purchases of 1) branded Namenda IR from June 1, 2012 through June 30, 2017; <sup>9</sup> 2) branded Namenda XR from June 4, 2013 (when branded Namenda XR launched) through June 30, 2017; and 3) generic Namenda IR from July 11, 2015 (when generic Namenda IR launched) through September 30, 2015; as compared to the total purchases (by all Claimants who submit valid, accepted Claim Forms) of a) branded Namenda IR from June 1, 2012 through June 30, 2017; b) branded Namenda XR from June 4, 2013 through June 30, 2017; and c) generic Namenda IR from July 11, 2015 through September 30, 2015, respectively. <sup>10</sup> For purposes of allocation, "purchases" throughout the allocation plan means the total units (capsules or pills) purchased, net of returns. <sup>11</sup> In particular, my methodology for pro rata allocation of the Net Settlement Fund to each Claimant is as follows:
  - a) <u>Allocation of damages based on generic purchases.</u> Because, as discussed above,
     1.13 percent of the Class damages were incurred on generic Namenda IR purchases, I have devised an allocation plan that will allocate 1.13 percent of the Net Settlement

4

<sup>&</sup>lt;sup>9</sup> As discussed above, June 1, 2012 is the beginning of the Class Period and the beginning of the damages period for Brand-Generic damages in the "No Reverse Payment Scenario" where, absent Defendants' alleged misconduct, generic Namenda IR would have launched June 1, 2012. Further, Defendant Forest produced transaction-level data through July 5, 2017 and, as I discussed in the Lamb Report, my damages analysis runs through June 30, 2017, that is, I calculated damages on brand Namenda IR and brand Namenda XR through June 30, 2017. See Lamb Report at ¶¶139-140.

<sup>&</sup>lt;sup>10</sup> September 30, 2015 is the end of the Class Period. Further, the period from generic launch on July 11, 2015 through September 30, 2015 is the period for which I have complete manufacturer sales data for generic Namenda IR produced by all manufacturers (Actavis, Amneal, Dr. Reddy's, Lupin, Mylan, and Sun).

<sup>&</sup>lt;sup>11</sup> All of my prior damages calculations utilized Class purchases net of returns as well. In addition, I note that a Claimant's percentage share will be zero if that Claimant timely submits a claim form but that Claimant's claim is rejected because, for example, the Claimant did not purchase brand or generic Namenda IR and brand Namenda XR directly from a pharmaceutical manufacturer that sold brand and/or generic Namenda IR and brand Namenda XR during the Class period and does not have any valid assignment covering any such direct purchases. Allocations to Claimants whose right to settlement allocation arises by virtue of assignments from Class members would be determined in the same way that allocations will be calculated for Class members; in these cases, the volumes of brand and generic purchases used to determine the allocation would be the volumes assigned to the Claimant by an otherwise eligible Class member (and the assignor Class member's brand and generic purchase volumes would be reduced by the same amount).

Fund to the Class's generic Namenda IR purchases, by dividing up this 1.13 percent pro rata, based on each Claimant's unit purchases of generic Namenda IR. So, for example, if Claimant "X" purchased 100 units of generic Namenda IR and there were 1,000 total generic Namenda IR units purchased by all Claimants who submitted valid Claim Forms, then, based on its generic Namenda IR purchases, Claimant X would receive an allocation of 10 percent (100/1,000) of the 1.13 percent of the Net Settlement Fund allocated to generic Namenda IR purchases, or 0.113 percent (10%\*1.13%) of the Net Settlement Fund.

b) Allocation of damages based on brand Namenda IR and brand Namenda XR purchases. Because, as discussed above, 98.87 percent of the Class damages were incurred on brand Namenda IR and brand Namenda XR purchases, I have devised an allocation plan that will allocate 98.87 percent of the Net Settlement Fund to the Class's purchases of brand Namenda IR and brand Namenda XR. My prior damages calculations, set forth in the Lamb Report, reflect the fact that a single brand Namenda XR capsule constituted a single day of therapy (or "DOT"), and two Namenda IR tablets constituted a DOT (because brand Namenda IR and generic Namenda IR were typically taken twice a day). Thus, a Claimant's purchases will be converted into DOT for purposes of allocating the 98.87 percent of the Net Settlement Fund that will be allocated based on brand purchases, as was done in my damages calculations in the Lamb Report. In effect, as a result of this conversion into DOT, in the allocation, a purchase of brand Namenda XR will be given double the weight of a Namenda IR purchase (and conversely, a brand Namenda IR purchase will be given half the weight of a brand Namenda XR purchase). So, for example, if Claimant "Z" purchased 200 units of brand Namenda IR and 100 units of brand Namenda XR, then Claimant Z purchased 200 DOT of Namenda (.5\*200 units of Namenda IR plus 100 units of brand Namenda XR). If there were 1,000 total DOT of brand Namenda IR and XR purchased by all Claimants who submitted valid Claim Forms, then Claimant Z would get 20 percent (200/1,000) of the 98.87 percent of the Net Settlement Fund

- allocated to brand Namenda IR and brand Namenda XR purchases, or 19.77 percent (20%\*98.87%) of the Net Settlement Fund.<sup>12</sup>
- c) <u>Each Claimant's total pro rata share</u>. Each Claimant's total pro rata share will be the sum of its share allocated on the basis of its brand purchases (if any) and the sum of its share allocated on the basis of its generic purchases (if any), as described in the preceding two subsections.
- Using data produced by Forest and by the manufacturers who sold generic Namenda IR 6. through September 30, 2015 (Actavis, Amneal, Dr. Reddy's, Lupin, Mylan, and Sun) as part of discovery in this matter, I have performed preliminary calculations of each Class member's purchases of brand and generic Namenda IR and brand Namenda XR during the relevant time period. These purchase totals can, and I understand will, be used to pre-populate the purchase totals in the Claim Forms mailed to Class members. In addition, I understand from Class Counsel that Claimants will have the option to submit their own purchase records as part of their claim, including any Claimants who file a Claim Form based on an assignment from a Class member. To the extent that any such submissions by Claimants differ from the sales data produced by Forest and generic manufacturers Actavis, Amneal, Dr. Reddy's, Lupin, Mylan, and Sun, I will analyze those submissions in conference with the claims administrator to finalize the calculations of the branded and generic Namenda DOT purchased by each Class member. In addition, my final calculations will assign pro rata shares only to those Claimants who submit valid, accepted Claim Forms (and will not assign pro rata shares of the Net Settlement Fund to, for example, a Class member that does not submit a Claim Form).
- 7. In my opinion, the methodology described above is reasonable and practical for the purposes of allocation of the Net Settlement Fund to Claimants. As I discussed, this methodology utilizes actual branded Namenda and generic Namenda sales data produced by Forest and all the generic manufacturers in the market from July 2015 through September 2015.

6

<sup>&</sup>lt;sup>12</sup> I note that, in my damages calculations, I converted the generic Namenda IR purchases into DOT in the same manner described here with respect to brand Namenda IR and brand Namenda XR purchases. However, I do not need to do this conversion for purposes of allocation with respect to the Class member's generic Namenda IR purchases because the conversion is mathematically neutral—all Claimant's generic Namenda IR purchases would be multiplied by .5, and so all Claimant's pro rata share of 1.13 percent of the Net Settlement Fund allocated on the basis of the generic Namenda IR would be exactly the same irrespective of using DOT or net units.

Furthermore, this methodology accounts for the differences in relative overcharges on branded and generic Namenda purchases, and thus is fair to Class members who purchased branded Namenda and fair to Class members who purchased only generic Namenda IR.

I declare that the foregoing is true and correct to the best of my knowledge and belief.

Russell L. Lamb, Ph.D.

December 17, 2019

# Appendix A



# Russell Lamb, Ph.D.

President Monument Economics Group Phone: (703) 615-3474

Email: rlamb@megconsulting.com

#### **Professional Summary**

Russell Lamb is an expert in antitrust economics and has testified concerning antitrust liability, impact, and damages. He has an extensive background in applied econometrics and has developed econometric models to measure damages in a number of matters involving allegations of horizontal price fixing. He has provided expert testimony in State and Federal Courts in the United States and in Canada on a range of issues including class-certification and economic damages in antitrust, RICO and consumer fraud matters. In addition, he has provided expert advice to client attorneys at all levels of the litigation. Dr. Lamb has an extensive background in the analysis of domestic and international agricultural markets and has authored more than 50 articles in peer-reviewed economics journals, trade press, and major newspapers.

Dr. Lamb's work has been cited by courts in certifying classes in the United States and Canada. For example, in In re Aftermarket Automotive Lighting Products Antitrust Litigation, the court held that his analysis provided "a sufficient basis from which to conclude that Plaintiffs would adduce common proof concerning the effect of Defendants' alleged price-fixing conspiracy on prices class members paid." In certifying the Class in In re: Titanium Dioxide Antitrust Litigation, the Court said, "This Court finds that Dr. Lamb's regression analysis accurately reflects the characteristics of the titanium dioxide industry, and the facts in this case." In In Re: Domestic Drywall Antitrust Litigation, the Court cited extensively to Dr. Lamb's analysis in its decision to certify the Class: "Dr. Lamb's expert opinion fits the facts of the case, is relevant, and is therefore admissible to show classwide injury and measurable damages in support of Plaintiffs' Motion for Class Certification. [...]

The Court [...] has thoroughly considered Dr. Lamb's opinion in its decision on the DPPs' Class Certification Motion." In the Canadian LCD Competition Act Class Action, the Court held that Dr. Lamb's analysis provided "evidence of a viable methodology for the determination of loss on a class-wide basis." In In re: Puerto Rican Cabotage Litigation, the Court held that "Dr. Lamb [had] set forth a reputable and workable model for determining damages as to individual class members." In certifying the class in Clarke and Rebecca Wixon, et al. v. Wyndham Resort Development Corp., et al., the Court held that "Dr. Lamb [had] presented a plausible class-wide method of proof." In certifying the class in Eugene Allan, et al., v. Realcomp II, Ltd., et al., the Court held that "the Plaintiffs have produced sufficient evidence that common proofs will yield a finding of class-wide damages that predominates over any specific individualized damages. The Lamb Report and Lamb Reply are sufficient to establish this fact." Furthermore, Dr. Lamb was the Indirect Purchaser Plaintiffs' expert in the In re: Polyurethane Foam Antitrust Litigation matter, which was certified by the Court in April 2014.

With regard to agricultural economics, Dr. Lamb has a particular expertise in agricultural markets and has undertaken extensive original research and econometric analysis on markets for agricultural commodities. His articles on agricultural economics have been published in peer-reviewed journals, trade press, and major newspapers. Dr. Lamb regularly presents at conferences on topics including the state of the U.S. Economy and farm policy.

Prior to co-founding Monument Economics Group, Dr. Lamb was a Senior Vice President at Nathan Associates Inc., where he directed the firm's litigation consulting practice nationally. Dr. Lamb previously served as a Principal at AACG in Arlington, VA, and as Managing Director and DC Office Head at Econ One Research. He earlier served as an Assistant Professor of Agricultural Economics and faculty member of the Graduate Group in Economics at North Carolina State University and as an Economist and Senior Economist in the Federal Reserve System of the United States, at the Federal Reserve Board and the Federal Reserve Bank of Kansas City.

# **Education**

- Ph.D., Economics, University of Pennsylvania, 1994
- M.A., Economics, The University of Maryland, 1989
- B.A., Economics, The University of Tennessee, 1987

#### **Expert Testimony Offered**

# **2019** *GAËTAN ROY c. JTEKT Corporation & al. (Bearings/Roulements)*

- Cour Supérieure District de Québec
- Case No. 200-06-000159-130
- Expert Report, November 12, 2019
- Opinion concerning class certification issues
- Retained by Siskinds LLP, Sotos LLP

# First Impressions Salon, Inc., et al., v. National Milk Producers Federation, et al.

- United States District Court for the Southern District of Illinois
- Case No. 3:13-cv-00454-NJR-SCW
- Expert Report, January 4, 2019
- Testified at deposition, February 13, 2019
- Expert Reply Report, May 3, 2019
- Testified at deposition, May 17, 2019
- Opinion concerning class certification and damages issues
- Retained by Barrett Law Group, NastLaw LLC, and Roberts Law Firm

# Sheridan Chevrolet Cadillac Ltd., et al., v. JTEKT Corporation, et al.

- Ontario Superior Court of Justice
- Court File No. CV-13-478644-00CP
- Expert Report, January 2, 2019
- Opinion concerning class certification issues
- Retained by Sotos LLP

#### **2018** Sheridan Chevrolet Cadillac Ltd., et al., v. Hitachi Ltd., et al.

- Ontario Superior Court of Justice
- Court File No. CV-14-506683-00CP
- Expert Report, October 4, 2018
- Opinion concerning class certification issues
- Retained by Sotos LLP

#### In Re Suboxone Direct Purchaser Antitrust Litigation

- United States District Court for the Eastern District of Pennsylvania
- Case No. 2:13-MD-02445-MSG
- Expert Report, September 18, 2018
- Testified at deposition, October 30, 2018
- Merits Expert Report, November 30, 2018
- Expert Rebuttal Report, January 11, 2019
- Testified at deposition, January 17, 2019
- Expert Merits Rebuttal Report, April 26, 2019
- Testified at deposition, June 12, 2019
- Opinion concerning class certification, merits, and damages issues

• Retained by Berger & Montague, P.C.; Garwin Gerstein & Fisher LLP; and Faruqi & Faruqi LLP

William Rushing, et al. v. Williams-Sonoma, Inc., et al.

- United States District Court Northern District of California, San Francisco Division
- Case No. 3:16-cv-01421-WHO
- Expert Report, July 25, 2018
- Opinion concerning class certification issues
- Retained by Rose Law Group, PC

The Hospital Authority of Metropolitan Government of Nashville and Davidson County, Tennessee, et al. v. Momenta Pharmaceuticals, Inc., et al.

- United States District Court Middle District of Tennessee Nashville Division
- Civil Action No. 15-cv-1100
- Testified at deposition, October 10, 2018
- Expert Report, June 22, 2018
- Expert Reply Report, September 21, 2018
- Testified at class certification hearing, May 13, 2019
- Declaration, May 21, 2019
- Expert Merits Report, May 24, 2019
- Declaration, June 18, 2019
- Expert Report, July 5, 2019
- Expert Supplemental Reply Report, July 5, 2019
- Testified at hearing, July 12, 2019
- Expert Merits Reply Report, July 29, 2019
- Testified at deposition, August 13, 2019
- Opinion concerning class certification and damages issues regarding indirect purchasers
- Retained by Lieff Cabraser Heimann & Bernstein, LLP

**2017** Fady Samaha and Urlin Rent a Car Ltd. v. Yamashita Rubber Co., Ltd., et al.

- Ontario Superior Court of Justice
- Court File No. CV-13-472262-00CP
- Expert Report, December 4, 2017
- Supplemental Report, July 13, 2018
- Opinion concerning class certification issues
- Retained by Siskinds LLP

In Re Lamictal Direct Purchaser Antitrust Litigation

- United States District Court New Jersey
- Case No. 1 2-95 -WHW-MCA
- Expert Report, November 6, 2017
- Revised Expert Reply Report, April 16, 2018
- Testified at deposition, June 6, 2018

- Opinion concerning class certification and damages issues
- Retained by Berger & Montague, P.C.

# In Re Namenda Direct Purchaser Antitrust Litigation

- United States District Court Southern District of New York
- Case No. 1:15-CV- 07488
- Expert Report, September 15, 2017
- Amended Expert Report, September 20, 2017
- Expert Reply Report, October 25, 2017
- Amended Expert Reply Report November 9, 2017
- Testified at deposition, October 6, 2017
- Opinion concerning class certification and damages issues
- Retained by Berger & Montague, P.C.; and Garwin Gerstein & Fisher LLP

#### *In Re Capacitors Antitrust Litigation*

- United States District Court Northern District of California San Francisco Division
- Case No. 3:14-CV-03264 -JD
- Expert Declaration, February 24, 2017
- Expert Reply Declaration, April 28, 2017
- Testified at deposition, May 17, 2017
- Expert Trial Declaration, November 30, 2018
- Expert Trial Reply Declaration, April 19, 2019
- Testified at deposition, May 23, 2019
- Opinion concerning class certification issues regarding indirect purchasers
- Retained by Cotchett, Pitre & McCarthy, LLP

#### **2016** Deere Construction, LLC, v. Cemex Construction Materials Florida, LLC, et al.

- United States District Court Southern District of Florida
- Case No. 15-24375-CIV-ALTONAGA/O'Sullivan
- Expert Report, September 14, 2016
- Testified at deposition, September 27, 2016
- Opinion concerning class certification issues
- Retained by Kozyak Tropin & Throckmorton, LLP; Harke Clasby & Bushman, LLP; and McCallum, Methvin & Terrell, P.C.

Luke Begonja v. Wyndham Vacation Resorts, Inc., et al. (Case No. 2015-CA-010943)

Gerrit Brouwer, Jr., et al. v. Wyndham Vacation Resorts, Inc., et al. (Case No. 2014-CA-008533)

Gary Gottschalk, et al. v. Wyndham Vacation Resorts, Inc., et al. (Case No. 2015-CA-001957)

Susan Hatzipetro, et al. v. Wyndham Vacation Resorts, Inc., et al. (Case No. 2014-CA-007996)

Shelly Keegan, et al. v. Wyndham Vacation Resorts, Inc., et al. (Case No. 2015-CA-001953)

Yvonne Klebba, et al. v. Wyndham Vacation Resorts, Inc., et al. (Case No. 2014-CA-008535)

Adriane McConville, et al. v. Wyndham Vacation Resorts, Inc., et al. (Case No. 2015-CA-001960)

Ernest W. Yeager Jr., et al. v. Wyndham Vacation Resorts, Inc., et al. (Case No. 2014-CA-008054)

- In the Circuit Court of the Ninth Judicial Circuit in and for Orange County, Florida
- Expert Report, September 14, 2016
- Testified at deposition, October 27-28, 2016
- Testified at deposition, March 2-3, 2017
- Expert Report, May 19, 2017
- Testified at deposition, August 29, 2017
- Opinion concerning damages issues
- Retained by Badham & Buck, LLC

In Re: Evanston Northwestern Healthcare Corporation Antitrust Litigation

- United States District Court for the Northern District of Illinois Eastern Division
- No. 07-C-4446
- Expert Report, July 28, 2016
- Expert Reply Report, January 25, 2017
- Testified at deposition, September 20, 2016
- Testified at deposition, February 22, 2017
- Opinion concerning damages issues
- Retained by Miller Law LLC

In Re: Ductile Iron Pipe Fittings ("DIPF") Direct Purchaser Antitrust Litigation

- United States District Court for the District of New Jersey
- Civ. No. 12-711 (AET)(LHG)
- Declaration, May 27, 2016
- Reply Declaration, March 31, 2017
- Testified at deposition, July 8, 2016
- Opinion concerning class certification, merits, and damages issues
- Retained by Cohen Milstein Sellers & Toll PLLC; and Kaplan Fox & Kilsheimer LLP

Nestlé Purina Petcare Company v. Blue Buffalo Company, Ltd.

Blue Buffalo Company, Ltd. v. Nestlé Purina Petcare Company, et al.

Blue Buffalo Company, Ltd. v. Wilbur-Ellis Company, et al.

Diversified Ingredients, Inc. v. Wilbur-Ellis Company, et al.

Diversified Ingredients, Inc. v. Custom AG Commodities, LLC, et al.

- United States District Court for the Eastern District of Missouri Eastern Division
- Cause No.: 4:14-CV-00859 RWS
- Affidavit, March 17, 2016
- Opinion concerning pricing issues
- Retained by Lashly & Baer, P.C.

In Re: Cast Iron Soil Pipe and Fittings Antitrust Litigation

- United States District Court Eastern District of Tennessee at Chattanooga
- Case No.: 1:14-md-2508
- Declaration, March 4, 2016
- Testified at deposition, May 19, 2016
- Opinion concerning class certification and damages issues
- Retained by Cohen Milstein Sellers & Toll PLLC; Cera LLP; and Kaplan Fox & Kilsheimer LLP

Darren Ewert v. Denso Corporation, et al.

- Supreme Court of British Columbia
- Case No. S-135610
- Expert Report, February 12, 2016
- Expert Reply Report, January 5, 2017
- Opinion concerning class certification issues
- Retained by Camp Fiorante Matthews Mogerman

Serge Asselin v. Hitachi, LTD & al.

- Cour Supérieure Disctirct de Québec
- Case No. 200-06-000180-144
- Expert Report, February 11, 2016
- Opinion concerning class certification issues
- Retained by Siskinds LLP

**2015** Thomas Mervyn v. Atlas Van Lines, Inc., et al.

- United States District Court Northern District of Illinois Eastern Division
- Case No. 1:13-CV-03587
- Expert Declaration, September 3, 2015
- Expert Report, February 4, 2016
- Opinion concerning data issues
- Opinion concerning damages issues
- Retained by Miller Law LLC

Thomas Mervyn v. Nelson Westerberg, Inc.

- United States District Court Northern District of Illinois Eastern Division
- Case No. 1:11-CV-06594
- Expert Report, July 27, 2015

- Opinion concerning damages issues
- Retained by Miller Law LLC

Lane's Gifts and Collectibles, LLC v. Microsoft Online, Inc.

- United States District Court Western District of Washington at Seattle
- No. 2:12-cv-01181-BJR
- Expert Report, March 23, 2015
- Testified at deposition, May 21, 2015
- Opinion concerning damages issues
- Retained by Nix, Patterson & Roach, L.L.P.; and Kessler Topaz Meltzer & Check, LLP

BlueCross BlueShield of Tennessee, Inc., et al. v. King Pharmaceuticals, Inc., et al.

- In the Circuit Court for Cocke County, Tennessee
- Civil Action No. 32941-II
- Expert Report, January 23, 2015
- Opinion concerning impact and damages issues
- Retained by Miller Law LLC

#### In Re: Domestic Drywall Antitrust Litigation

- United States District Court for the Eastern District of Pennsylvania
- MDL No. 2437 13-MD-2437
- Trial Expert Report, January 23, 2015
- Reply Expert Report, April 23, 2015
- Expert Report concerning class certification, August 3, 2016
- Expert Reply Report concerning class certification, January 9, 2017
- Affidavit, July 11, 2019
- Testified at deposition, February 25, 2015
- Testified at deposition, August 30, 2016
- Testified at deposition, February 17, 2017
- Testified at class certification hearing, April 27, 2017
- Expert Supplemental Report, July 31, 2017
- Opinion concerning merits issues regarding direct purchasers
- Opinion concerning class certification issues, impact and damages regarding direct purchasers
- Retained by Cohen Milstein Sellers & Toll PLLC; Berger & Montague, P.C.; and Spector Roseman Kodroff & Willis, P.C.

#### In Re: Processed Egg Products Antitrust Litigation

- United States District Court for the Eastern District of Pennsylvania
- MDL No. 2002
- Expert Declaration, January 22, 2015
- Expert Reply Declaration, April 3, 2015
- Testified at deposition, May 7, 2015
- Opinion concerning merits and damages issues regarding indirect purchasers

Retained by Straus & Boies, LLP

## **2014** In Re: Class 8 Transmission Indirect Purchaser Antitrust Litigation

- United States District Court for the District of Delaware
- Civil Action No. 11-cv-00009 (SLR)
- Declaration, November 3, 2014
- Reply Declaration, March 6, 2015
- Trial Declaration, March 27, 2015
- Trial Reply Declaration, July 2, 2015
- Testified at deposition, December 17, 2014
- Testified at deposition, March 16, 2015
- Testified at class certification hearing, March 25, 2015
- Testified at deposition, May 1, 2015
- Opinion concerning class certification issues regarding indirect purchasers
- Opinion concerning merits and damages issues regarding indirect purchasers
- Retained by Glancy Binkow & Goldberg LLP

#### Mark S. Wallach, et al., v. Eaton Corporation, et al.

- United States District Court District of Delaware
- Civil Action No. 10-260-SLR
- Expert Report, November 3, 2014
- Expert Reply Report, March 6, 2015
- Trial Expert Report, March 27, 2015
- Trial Expert Reply Report, July 2, 2015
- Testified at deposition, December 16, 2014
- Testified at deposition, March 16, 2015
- Testified at class certification hearing, March 25, 2015
- Testified at deposition, May 1, 2015
- Opinion concerning class certification issues regarding direct purchasers
- Opinion concerning merits and damages issues regarding direct purchasers
- Retained by Cohen Milstein Sellers & Toll PLLC

Sheridan Chevrolet Cadillac Ltd., et al., v. Furukawa Electric Co. Ltd., et al.

Sheridan Chevrolet Cadillac Ltd., et al., v. Mitsubishi Electric Corporation, et al.

- Ontario Superior Court of Justice
- Court File Nos. CV-12-446737-00CP / CV-14-496994-00CP
- Expert Report, April 15, 2016
- Expert Report, October 14, 2014
- Opinion concerning class certification issues
- Retained by Siskinds LLP

#### Resco Products, Inc., v. Bosai Minerals Group Co., Ltd., et al.

- United States District Court for the Western District of Pennsylvania
- Civil Action No.: 2:06-cv-235-JFC

- Expert Report, September 24, 2008
- Expert Report, September 29, 2014
- Supplemental Expert Report, December 15, 2014
- Testified at deposition, February 13, 2015
- Opinion concerning damages
- Retained by Boies, Schiller & Flexner LLP

# Fond Du Lac Bumper Exchange Inc., et al. v. Jui Li Enterprise Company Ltd. et al.

- United States District Court Eastern District of Wisconsin
- Case No.: 2:09-cv-00852-LA
- Affidavit, August 1, 2014
- Affidavit, November 4, 2014
- Declaration, April 24, 2015
- Expert Report, July 15, 2015
- Expert Reply Report, November 24, 2015
- Expert Surreply Report, January 15, 2016
- Expert Trial Report, August 18, 2016
- Expert Trial Reply Report, December 20, 2016
- Testified at deposition, October 1, 2015
- Testified at deposition, February 13, 2017
- Opinion concerning class certification and damages issues
- Opinion concerning Defendants' replacement data
- Opinion concerning Defendant and LKQ transaction-level data
- Opinion concerning merits and damages issues
- Retained by Stueve Siegel Hanson, LLP

#### Meredith Corporation, et al., v. SESAC, LLC, et al.

- United States District Court for the Southern District of New York
- 09 Civ. 9177 (PAE)
- Expert Report, July 10, 2014
- Opinion concerning class certification issues
- Retained by Weil, Gotshal & Manges LLP

#### Janet Skold, et al., v. Intel Corporation, et al.

- Superior Court of the State of California for the County of Santa Clara
- Case No. 1-05-CV-039231
- Expert Report, June 14, 2007
- Testified at deposition, August 31, 2007
- Testified at deposition, January 10, 2014
- Opinion concerning class certification issues
- Opinion concerning damages issues
- Retained by Girard Gibbs LLP

In Re: Polyurethane Foam Antitrust Litigation

- United States District Court Northern District of Ohio Western Division 8
- MDL No. 2196
- Declaration, June 11, 2013
- Reply Declaration, October 23, 2013
- Trial Declaration, March 18, 2014
- Reply Trial Declaration, June 30, 2014
- Testified at deposition, August 20, 2013
- Testified at deposition, November 20, 2013
- Testified at class certification hearing, January 15, 2014
- Testified at deposition, April 14, 2014
- Testified at deposition, July 14, 2014
- Opinion concerning class certification issues regarding indirect purchasers
- Opinion concerning merits and damages issues
- Retained by Miller Law LLC

# **Professional Experience**

#### **Economic Consulting Positions**

Monument Economics Group, Oct. 11, 2016 - Present

Nathan Associates, Inc., Arlington, VA, Senior Vice President, Jan. 2013 – Sep. 20, 2016

**Advanced Analytical Consulting Group, Inc.**, Washington, DC, *Principal*, Mar. 2011 – Jan. 2013

**Econ One Research, Inc.**, Washington, DC, Managing Director and DC Office Head, Jul. 2006 – Mar. 2011

- Opened and staffed the DC office; managed office affairs on a daily basis
- Retained as an expert witness for damages and class certification issues in antitrust, breach of contract, product liability and RICO cases; representative testimony includes determination of liability and damages in a case involving resale price maintenance in consumer products, class certification in a horizontal price-fixing case involving international travel in the airline industry, class certification in a consumer class action involving RICO claims in state court
- Industry pre-litigation analyses for consumer products, chemicals, and other industries

Navigant Consulting, Inc., Washington, DC, Associate Director, Feb. 2006 – Jul. 2006

• Case manager for damages analysis in asbestos litigation and personal injury claims

Nathan Associates, Inc., Arlington, VA, Managing Economist, Jul. 2004 – Feb. 2006

- Case manager for economic analysis of class certification and damages issues in antitrust and RICO cases involving the chemical, consumer products, and tobacco industries
- Retained as expert on damages for direct purchasers of NBR in the Crompton Global Settlement; submitted an Affidavit on damages and appeared before the Special Master for the Crompton Global Settlement (the Hon. Kenneth Feinberg)

# **Board Membership**

- Board of Advisors, American Antitrust Institute, Washington, DC
- Department of Economics Advisory Council, University of Tennessee, Knoxville, Chairman, Spring 2006 April 2011

#### **Teaching Positions**

- The George Washington University, Washington, DC, *Adjunct Assistant Professor of Economics*, Fall 2004 present
- North Carolina State University (NCSU), Assistant Professor (Department of Agricultural and Resource Economics), Fall 1999 – Spring 2004
- The University of Pennsylvania, *Adjunct Instructor*, Summer 1990 Spring 1994

# **Additional Teaching Experience**

- The Wharton School Evening Division, Philadelphia, PA, summer 1993
- Rutgers University, Camden, NJ, summer 1993
- Philadelphia College of Textiles and Science, Philadelphia, PA, fall 1992
- The Pennsylvania State University, Media, PA, 1991
- St. Mary's College of Maryland, St. Mary's City, MD, summer 1989
- The University of Maryland University College, College Park, MD, 1988-1989

#### **Courses Taught**

- Managerial Economics for MBA students (George Washington University)
- Law and Economics (George Washington University)
- Intermediate Microeconomics graduate level (George Washington University)
- Latin American Economic Development (George Washington University)
- International Trade: Theory and Policy (George Washington University)
- International Finance: Theory and Policy (George Washington University)
- Agricultural Production and Supply Ph.D. field course (North Carolina State University)
- U.S. Agricultural Policy (North Carolina State University)

- Microfinance: Theory, Practice and Regulation (Superintendencia de Banca y Seguros)
- Statistical Analysis for Economics (University of Pennsylvania)
- Principles of Microeconomics (University of Maryland, St. Mary's College of Maryland)
- Principles of Macroeconomics (University of Pennsylvania, The Wharton School, Penn State University)
- Fundamentals of Micro/Macro Economics (University of Maryland)
- Environmental and Natural Resource Economics (Rutgers)

# Federal Reserve Experience

Federal Reserve Bank of Kansas City, *Senior Economist* Jan. 1998 – Aug. 1999; *Economist*, Jan. – Dec. 1997

- Analysis of regional, macroeconomic developments in agriculture, and energy
- Research on public policy towards agriculture in the U.S., especially the impact of farm policy reform
- Briefings to the Bank president and outside groups on the regional economy, agriculture, agricultural trade

Board of Governors of the Federal Reserve System, Economist, Jun. 1994 - Dec. 1996

- Analysis of macroeconomic conditions, commodity markets, and prices (CPI, PPI, Core prices)
- Forecasting of agricultural output, prices, and income
- Briefings to the Board of Governors on agriculture and food-price developments

#### **Other Consulting Experience**

World Perspectives, Inc., 2003 - 2004

- Analysis of trade barriers for U.S. exports of feed ingredients, pet food ingredients, and food ingredients
- Analysis of the impact of a Free Trade Area of the Americas on U. S. soybean producers
- Analysis of the potential for U.S. Halal-certified meat exports to the Middle East

Womble Carlyle Sandridge & Rice, LLP, 2003 - 2004

- Provided expert testimony related to the estimation of business profitability Smith-Moore, 2002 - 2003
- Provided economic analysis of the U.S. Tobacco Program

Superintendencia de Banca y Seguros (Lima, Peru), 1998 - 2000

• Developed and taught a class on Microfinance issues (in English) to students enrolled in a training program for bank examiners; the program was sponsored by the Inter-American Development Bank.

# World Bank, Africa Technical Department, 1992 – 1993

• Summarized and provided an overview of data available on African economic and social indicators

# ACG-Afrique, January 1993

• Provided critical review of a study document outlining the impact of structural adjustment on African agriculture

# **Professional Organizations**

- National Association for Business Economics
- American Economic Association

#### Papers, Publications, and Speeches

# Papers Published in Refereed Journals

- "Government Regulation and Quality in the U.S. Beef Market," (with Peyton Ferrier) *Food Policy*, Vol. 32, No. 1, February 2007, 84-97
- "Rent-seeking in U.S.-Mexican Avocado Trade," *Cato Journal*, Vol. 26, No. 1, December 2006, 159-177
- "Consolidation in U.S. Agriculture and the Role of Public Policy," *The ICFAI Journal of Agricultural Economics*, Vol. 1, 2004, 7-16
- "Fertilizer Use, Risk, and Off-farm Labor Markets in the Semi-Arid Tropics of India," *American Journal of Agricultural Economics,* Vol. 85, No. 2, May 2003, 359-371
- "Inverse Productivity: Land Quality, Labor Markets, and Measurement Error," *Journal of Development Economics*, Vol. 71, No. 1, June 2003, 71-95
- "A Market-Forces Policy for the New Farm Economy?" *Review of Agricultural Economics*, Vol. 24, No. 1, 1 March 2002, 15-30
- "Food Crops, Exports, and the Short-run Policy Response of Agriculture in Africa," *Agricultural Economics*, Vol. 22, No. 3, April 2000, 271-298
- "FAIR Act Implications for Land Values in the Corn Belt," (with Jason Henderson) Review of Agricultural Economics, Vol. 22, No. 1, Summer Spring 2000, 102-119
- "Why are Estimates of Agricultural Supply Response So Variable?" (with Francis X. Diebold) *Journal of Econometrics*, Vol. 76, No. 1-2, January February 1997, 367-373

#### Non-refereed Publications, Articles, and Editorials

- "The Predominance Requirement for Antitrust Class Actions Can Relevant Market Analysis Help?" (with Jeffrey Leitzinger) American Bar Association – Section of Antitrust Law, Economics Committee Newsletter, Vol. 7, No. 1, Spring 2007, 17-22
- "Reform of U.S. Farm Policy in an Integrating World Economy," *Developing Countries in the WTO System*, 2006
- "New Farm Economy," *Regulation*, Winter 2003-2004, Cato Institute for Public Policy Research, 2003
- "What Road Will U.S. Economy Take in 2003?" *Southeast Farm Press*, 5 February 2003
- "Fast Track for the Tax Cuts," guest editorial, News and Observer, 18 January 2003
- "The 2002 Farm Bill," (with Blake Brown and Michele Marra) NC State Economist, November – December 2002
- "Economy-minded Tax Cuts: Bush's Reductions Provided the Boost to Lift U.S. From Recession," guest editorial, *News and Observer*, 2 July 2002
- "Policy Only Effective if Farm Economy is Recognized," special report to *Feedstuffs*, 5 June 2000
- "Aid During Crisis of Little Long-term Help to Farmers," guest editorial, *Kansas City Star*, 23 August 1999
- "Survey of Agricultural Credit Conditions," Federal Reserve Bank of Kansas City," Regional Economic Digest, various issues, 1997-1999
- "U.S. Agriculture at the Crossroads in 1999," *Economic Review,* Federal Reserve Bank of Kansas City, Vol. 84, No. 1, 1999, 73-91
- "Can U.S. Oil Production Survive the 20th Century?" *Economic Review,* Federal Reserve Bank of Kansas City, Vol. 84, Quarter I, 1999
- "Will the Tenth District Catch the Asian Flu?" (with Ricardo Gazel) *Economic Review*, Federal Reserve Bank of Kansas City, Vol. 83, Quarter II, 1998, 9-26
- "From the Plains to the Plate: Can the Beef Industry Regain Market Share?" (with Michelle Beshear) *Economic Review*, Federal Reserve Bank of Kansas City, Vol. 83, Quarter IV, 1998, 49-66
- "U.S. Agriculture: Another Solid Year in 1998?" (with Mark Drabenstott) *Economic Review,* Federal Reserve Bank of Kansas City, Vol. 83, No. 1, Quarter I, 1998, 55-74
- "How Will the 1996 Farm Bill Affect the Outlook for District Farmland Values?" Economic Review, Federal Reserve Bank of Kansas City, Vol. 82, Quarter IV, 1997, 85-101
- "Food Prices and the Farm Sector," monthly *Greenbook*, Federal Reserve Board of Governors, various issues 1994-1996

- "Hedge to Arrive Contracts," Memo to the Board of Governors, Federal Reserve Board of Governors, 5 June 1996
- "Prices in the May Greenbook," Federal Reserve Board of Governors, 19 May 1996
- "Prices in the March Greenbook," Federal Reserve Board of Governors, 24 March 1996
- "Commodity Price Developments," Weekly memo to the Board of Governors, Federal Reserve Board of Governors, August 1994 December 1996

#### **Conference Presentations**

- "Class Action Developments," panelist at the American Antitrust Institute's 6<sup>th</sup>
   Annual Private Antitrust Enforcement Conference, Washington, DC: 4 December 2012
- "Consequences for Antitrust Thought and Practice," presented at the American Antitrust Institute Invitational Symposium: Antitrust Challenge of Multi-Channel Distribution in the Internet Age, Washington, DC: 22 June 2011
- "The U.S. Economy in the Year Ahead," presented at the Long Company Annual Conference, Chicago, IL: 11 September 2009 and 19 September 2008
- "The U.S. Economic Outlook," presented at the Industry Outlook Conference, Chicago, IL: 17 October 2006 and 18 October 2005
- "How Will the Economy Impact Your Business?" presented at the Long Company Annual Conference, Las Vegas, NV: 14 August 2004
- "Focus on The Economy" presented at Milling and Baking News Annual Purchasing Managers' Conference, Kansas City, MO: 14 June 2004, 10 June 2003 and 11 June 2002
- "The U.S. Economic Outlook and Agriculture," presented at the Industry Outlook Conference, Chicago, IL: October 2003
- "The U.S. Economic Outlook and Agriculture," presented at the Industry Outlook Conference, Breckenridge, CO: 7 April 2002
- "The U.S. Economic Outlook: The Cost of Terror," presented at the Southern Agricultural Outlook Conference, Atlanta, GA: 24 September 2001
- "The Economy in Focus," presented at *Milling and Baking News* annual purchasing managers' conference, Kansas City, MO: 5 June 2001
- "The Great American Growth Machine," presented at the Southern Agricultural Outlook Conference, Atlanta, GA: 27 September 2000
- "The Economy in Focus," presented at *Milling and Baking News* annual purchasing managers' conference, Kansas City, MO: 6 June 2000
- "The Outlook for the U.S. Pork Sector," presented to the Industry Outlook Conference, Las Vegas, NV: 17 April 2000

- "The National Economic Outlook: The Road Ahead," presented to the Food Industry Outlook Conference, Breckenridge, CO: 11 April 1999
- "Farm Policy for the New Millennium," presented to Federal Reserve Bank of Kansas City, Division of Bank Supervision and Regulation, Bank Examiners' Annual Training Conference, 7 January 1999
- "The Impact of the 1996 Farm Bill on Farmland Values," (with Jason Henderson) first place poster presentation at the annual meetings of the American Agricultural Economics Association, Salt Lake City, UT: 4 August 1998
- "A Note on the Inverse Productivity Relationship," presented at the annual meetings of the Western Economic Association International, Seattle, WA: July 1997
- "Off-farm Labor Supply and Fertilizer Use in the Semi-Arid Tropics of India," presented at the annual meetings of the American Agricultural Economics Association, August 1995
- "Prices for Food-Away-From-Home and Core Inflation: Some Empirical Relationships," (with James E. Kennedy) presented at the Federal Reserve System Committee on Agriculture, Richmond, VA: October 1995
- "Some Simple Dynamics of Farming," presented at the annual meetings of the American Agricultural Economics Association, Orlando, FL: August 1993
- "Structural Adjustment and Food Security," (with W. Graeme Donovan), presented at the annual meetings of the American Agricultural Economics Association, Orlando, FL: August 1993
- "Structural Adjustment and African Agricultural Supply Response to Exchange Rate and Price Movements," (with W. Graeme Donovan), presented at the annual meetings of the Southern Agricultural Economics Association, Tulsa, OK: January 1993

#### **Other Presentations**

- Panelist, "Antitrust Class Actions Where Are We? A 360 Degree Perspective,"
   NYSBA Annual Antitrust Law Section Meeting," 30 January 2014
- Panelist, Retrospective on the Baby Products Litigation, ABA Section of Antitrust Law: Pricing Conduct Committee, 31 July 2013
- Panelist, Economic Forecasting Summit, Northern Indiana Workforce Investment Board, Inc., 29 March 2007
- "The Welfare Benefits of USDA Beef Quality Certification Programs" (with Peyton Ferrier), presentation memo, 2007
- "Reform of U.S. Farm Policy in an Integrating World Economy," presented to the Cordell Hull Institute, Trade Policy Roundtable on Reform of U.S. Farm Policy and the WTO System, Washington, DC: 31 March 2006
- "The Case for a Market-forces Farm Policy in the U.S." presented at the Cordell Hull Institute Trade Policy Roundtable, Washington DC: 26 May 2005

- "How Will the Economy Impact Your Business?" presented at the Apple Processors Association annual meeting, Homewood Resort, 20 June 2004
- "The U.S. and International Economic Outlook," presented at the AgFirst Loan Officer's Seminar, Atlanta, GA: 30-31 October 2002
- "Will the U.S. Economy Bounce or Crawl?" presented to the Eastern Bankruptcy Institute, North Myrtle Beach, SC: 1 June 2002
- "The U.S. Economic Outlook and Agriculture," presented to the National Pork Producers Pork Action Group, Washington, DC: 10 April 2002
- "The U.S. Economic Outlook" presented to the Risk Management Associates, Raleigh, NC: 7 February 2002
- "The U.S. Economic Outlook: The Cost of Terror," presented at the National Pork Producers Pork Action Group, Marco Island, FL: 14 November 2001
- "Consolidation in Agriculture and the Role of Public Policy," paper presented to the Southern Extension Meetings, Williamsburg, VA: 13 June 2000
- "The New Farm Economy," presented at the annual meetings of the National Association of County Agricultural Agents, Omaha, NE: 14 September 1999
- "Regional Economic Update," presented to bankers in Kansas, Nebraska, Missouri, and Oklahoma as part of the Regulatory Update Seminar, Federal Reserve Bank of Kansas City, April 1999
- "The National Economic Outlook," presented to Oklahoma State University Advanced Cattle Management Seminar, Stillwater, OK: 11 March 1999
- "Regional Economic Update," presented to Thomas Hoenig, President, Federal Reserve Bank of Kansas City, 13 November 1998
- "Can the Tenth District Survive the Asian Flu?" The Federal Reserve Bank of Kansas City Economic Forums, nine presentations to bankers in Wyoming, Oklahoma, and New Mexico, 21 September 21 October 1998
- "The Impact of Asian Economic Developments on Tenth District Agriculture," presented to Thomas Hoenig, President, Federal Reserve Bank of Kansas City, 30 January 1998
- "The Outlook for the Nebraska Economy," The Federal Reserve Bank of Kansas City: Nebraska Economic Forums, six presentations to bankers in Nebraska, 6-15 October 1997
- "Update on the Macroeconomy and Special Briefing on Forecast Performance at the Kansas City Fed," presented to Thomas Hoenig, President, Federal Reserve Bank of Kansas City, 13 August 1997
- "Regional Economic Update," presented to Thomas Hoenig, President, Federal Reserve Bank of Kansas City, 14 May 1997 and 21 March 1997
- "Producer Prices, Retail Sales, and Agricultural Commodity Markets," presented to the Board of Governors of the Federal Reserve System, 15 July 1996

#### **Referee Experience**

# Referee for the Following Academic Journals

- World Development, 1993
- Journal of Development Economics, 1994, 1995
- International Economic Review, 1995
- Journal of Human Resources, 1997
- Journal of Business and Economics Statistics, 1997
- American Journal of Agricultural Economics, 1999, 2001, 2002
- Agricultural Economics, 2000, 2001, 2004
- Agricultural Finance Review, 2000, 2004
- Review of Agricultural Economics, 2000, 2002, 2004
- Journal of Agricultural and Resource Economics, 2000, 2001, 2002
- Emerging Markets Review, 2001
- Contemporary Economic Policy, 2004

#### Fellowships, Honors, and Awards

# **Fellowships**

- Departmental Fellowship, University of Pennsylvania, 1989-1990
- Dean's Fellowship, University of Pennsylvania, 1991-1992
- Graduate School Fellowship, University of Maryland, College Park, 1987-1989

#### **Honor Societies and Professional Organizations**

- Phi Eta Sigma National Honor Society
- Mortar Board National Honor Society
- Golden Key National Honor Society
- Vice President for Professional Activities, Delta Sigma Pi

#### **Awards**

- Top Graduate in Liberal Arts, University of Tennessee, Knoxville, Spring 1987
- Chancellor's Citation for Extraordinary Professional Promise, University of Tennessee, Knoxville
- Chancellor's Citation for Outstanding Academic Achievement, University of Tennessee, Knoxville
- First place poster presentation, American Agricultural Economics Association annual meetings, August 1998 (with Jason Henderson)

- Honorable mention, American Agricultural Economics Association, Essay for the 21<sup>st</sup> Century, 2001, "A Market Forces Policy for the New Farm Economy"
- Honorable mention, American Antitrust Institute Antitrust Enforcement Awards, Outstanding Antitrust Litigation Achievement in Economics (for work on *In Re Titanium Dioxide Antitrust Litigation matter*)
- American Antitrust Institute Antitrust Enforcement Awards, Outstanding Antitrust Litigation Achievement in Economics (for work on *In Re Domestic Drywall Antitrust Litigation matter*)

# **External Funding**

• "Unmanufactured Flue-Cured Tobacco Exports and the Export Component of the Quota Formula." \$13,890 NC Tobacco Foundation. With Blake Brown 2000 – 2001.

#### **Professional Activities and Services**

#### **Graduate Student Advising**

M.A. degree, North Carolina State University

• Joe Weinberg (Political Science)

Master of Economics, North Carolina State University

- William Pole (2000)
- Dwight Wilder (Chairman, 2002)
- Adrian Atkeson (2002)
- Sarah Spivey
- Li Zhang (Chairman, 2003)
- Nia Atmadja (2003)

Doctor of Philosophy, North Carolina State University

- William Deese (2003)
- Peyton Ferrier (Chairman, 2004)
- Yang Wang (2003)
- Bobby Huggett (2003)
- Syed Wadood (Chairman, 2004)
- Henry Kuo

#### **Economic and Statistical Modeling Skills**

• Experience with all major statistical software including SAS, STATA, LIMDEP and C++; applied econometric modeling skills in damage analysis of consumer industries, chemicals industries, and agricultural markets, correlation analysis for class certification.